The Hornet Buzz
News from the Nest

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First LRIP SHARP Pod Delivered

F/A-18 Public Affairs Office

The Navy received delivery of the first Shared Reconnaissance Pod (SHARP) at a ceremony held April 2, 2003 at Raytheon Technical Services Company facility in Indianapolis, Indiana.

This delivery, the first of two Low-Rate Initial Production (LRIP) pods to be delivered under this contract, provides the U.S. Navy's F/A-18 program with a significantly improved capability in tactical reconnaissance. Raytheon was recently awarded a contract for eight additional SHARP LRIP systems.

"This is a big day for us; 50 months ago we were asked to supply Tactical Reconnaissance capability to the USS *Nimitz*," said Rear Adm. James B. Godwin, III, Program Executive Officer for Tactical Aircraft, praising the SHARP Team for their diligence and hard work in achieving this milestone.

"Many people didn't think we would deliver this on time. This team has pulled together in ways I couldn't have imagined."

SHARP will replace the current Carrier Air Wing tactical reconnaissance capability provided by the film-based F-14 Tactical Air Reconnaissance Pod System (TARPS). Fleet introduction of the SHARP system is on the F/A-18F Super Hornet for its early operational capability on the USS *Nimitz* (CVN 68). Capt. Charles Wright, CVW-11, sent kudos from aboard the USS *Nimitz*. "We've flown it in workups and the pictures are great," he said.

Photo courtesy of Raytheon

Members of the NAVAIR and Industry team gather to accept the first delivery of an LRIP SHARP Pod.

"As warfighters we look forward to using this equipment to make the cycle of finding, fixing, and destroying enemy targets go faster than ever before."

The Raytheon-designed pod incorporates a rotating mid-section to optimize coverage, to protect the window by allowing stowage under the strongback, and to reduce the size and life cycle expense of large, fixed windows. The pod's design also provides mobility – it mounts on a bomb rack like any smart weapon – allowing for more flexibility in reconnaissance mission planning. While the initial systems employ EO/IR sensors for use on the F/A-18E/F aircraft, the pod design is readily adaptable to many sensor payloads on a wide range of aircraft.

Remarking on the SHARP team's achievements in what many thought of as impossible, NAVAIR F/A-18 Program Manager Capt. Jeff Wieringa said he couldn't help but think of a quote his granddad use to say, "The hard stuff we do everyday, the impossible just takes a little longer."

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Swiss Looking at E/F to Replace Aging Aircraft

Michael Ryan
F/A-18 Swiss IPT Lead

The Commander in Chief of Switzerland's Air Force, Lt. Gen. Hans Rudolph Fehrlin paid a three day visit to the U.S. in March and was a guest aboard NAVAIR Patuxent River on March 18.

The Swiss Air Force is looking at the F/A-18E/F as a possible replacement for their current Mirage III R/S reconnaissance aircraft. Commonality of aircraft equipment, systems, and support equipment, as well as capability and interoperability are the criteria driving the replacement aircraft selection.

Fehrlin's visit to Pax was the second stop on his itinerary. Upon his arrival Fehrlin was met by Rear Adm. Bert Johnston, Vice Commander Naval Air Systems Command.

After a brief visit at the NAVAIR Headquarters situated in the Moffet building and an exchange of greetings, the remainder of the day was spent examining the current status of the F/A-18C/D and E/F aircraft programs.

Photo by Michael Ryan
Members of the Swiss contingent pose in front of an F/A-18 Hornet during their visit to Pax River.

Maj. Gen. Andre Calcio-Gandino (Defense, Military, Naval and Air Attache' Embassy of Switzerland); Lt. Col. Franz Josef Amacker (Deputy Defense, Military, Naval and Air Attachɛ' Embassy of Switzerland); Col. Peter Egger (Commander Air Force Brigade 31) and Maj. Thomas Egger (Aide de Camp, CINC Swiss Air Force) accompanied Fehrlin.

Capt. Win Everett, F/A-18 Deputy Program Manager for Fleet Support, provided a brief on the status of the U.S. Navy F/A-18C/D aircraft fleet. As part of his brief Everett included a "roadmap" of the planned improvements and expected service life for the U.S. aircraft. Topics of discussion centered on the update of the Swiss Weapons and Tactics Trainer (WTT) flight simulator. Also discussed was the possible replacement of the WTT with the Tactical Operational Flight Trainer (TOFT).

Capt. Jeffrey Wieringa briefed the status of the F/A-18E/F production and gave insight into future enhancements planned for the U.S. Navy aircraft. After these briefs Fehrlin toured the F/A-18E/F maintenance spaces and flew the F/A-18E/F flight simulator.

The third day of his trip Fehrlin met with the Navy International Programs office to discuss training programs, release ability issues, and the Swiss Upgrade 21 Program.

NAVAIR Rear Adm. Bert Johnston and Lt. Gen. Hans Rudolph Fehrlin, Commander in Chief of Switzerland's Air Force exchange greetings.

Out and About With The Fleet

Mediterranean Sea (April 11, 2003) - Two F/A-18 Hornets assigned to the "Gunslingers" of Strike Fighter Squadron VFA-105 fly close air support (CAS) missions for coalition special operations forces. The USS *Harry Truman* (CVN 75) and Carrier Air Wing Three are deployed conducting combat missions in support of Operation Iraqi Freedom. Operation Iraqi Freedom is the multi-national coalition effort to liberate the Iraqi people, eliminate Iraq's weapons of mass destruction, and end the regime of Saddam Hussein. U.S. Navy photo by Cmdr. Tom Lalor.

The Arabian Gulf (Apr. 4, 2003) -- An Aviation Boatswain's Mate directs an F/A-18E Super Hornet assigned to the "Tophatters" of Strike Fighter Squadron VFA-14 into position for launch from the flight deck aboard USS *Abraham Lincoln* (CVN 72). USS *Abraham Lincoln* and Carrier Air Wing Fourteen (CVW-14) are deployed conducting combat missions in support of Operation Iraqi Freedom. U.S. Navy photo by Photographer's Mate 3rd Class Elizabeth A. Bartneck.

Central Command Area of Responsibility (April 9, 2003) - A U.S. Navy F/A-18 Hornet strike fighter flying missions in Operation Iraqi Freedom receives fuel from a KC-10 Extender. The fighter is carrying a Joint Direct Attack Munition on its inside-port pylon. The Extenders are assigned to the 305th/514th Air Mobility Wing, McGuire AFB, N.J., deployed to Burgas Airport and nearby Camp Sarafovo, Bulgaria, to support tanker operations in support of Operation Iraqi Freedom. U.S. Air Force photo by MSgt Dave Ahlschwede.

* All Photos Available for Download at http://www.news.navy.mil

FTI II Brings New Opportunity to Battlefield

Nicolette Cormier

The medieval wizard Merlin came up with many magical feats to help King Arthur vanquish his foes. Today's newest technical wizardry known as Fast Tactical Imagery II (FTI II), a reconnaissance intelligence strike module, provides time critical strike information that brings a new target of opportunity to the battlefield. The system had its first operational flight aboard the USS *Abraham Lincoln* (CVN 72) operating in the Persian Gulf on April 3, 2003.

Used initially by the F-14 community, the FTI II is an upgrade designed and developed for the F/A-18 Hornet to provide image capture, compression, transmission, reception and display in the cockpit.

"From a fleet perspective the most important capability this system brings is it transfers imagery from cockpit to cockpit or ground station to cockpit," said Sharon Wright, Tactical Reconnaissance Program Manager. "Not only is this a great target identifier for the aircrew, but it also assists them with bomb assessment damage."

In a reconnaissance scenario a squadron commander is able to download the cockpit images and view the battle space at extended ranges through images provided immediately by his aircrews. Capability to upload and download target images before and after the mission is made possible by a removable compact flash card allowing bomb damage assessment images to be transmitted immediately after the strike. A short text message can be attached and sent out with the image, or transmitted as stand-alone text files for cockpit display.

The FTI II has full serial control of the HI 8 mm-video tape recorder for record, rewind, playback and capture of recorded video. The system is compatible with many software platforms including all Navy carriers and portable FTI laptops.

Engineers from NAVAIR recently returned from the USS *Nimitz* (CVN 68) after installing the FTI II hardware on six F/A-18F model jets. A team comprised of Navy government and industry personnel are working together on the Engineering Change Proposal (ECP) to install the FTI II on F/A-18 aircraft.

"From a fleet perspective the most important capability this system brings is it transfers imagery. from cockpit to cockpit or ground station to cockpit," said Sharon Wright, TACRECCE Program Manager.

VX-23 Accelerates Weapon Carriage and Employment Testing for Deployed Super Hornets

Cmdr. Tom Huff
FA-18 Class Desk

Strike Test and Evaluation Squadron 23 (VX-23) NAVAIR Patuxent River, Md. recently adjusted its testing schedules to respond to a fleet request for GBU-12 500 pound laser guided bomb capability on FA-18E/F Super Hornets participating in Operation Iraqi Freedom. Successfully shrinking the test planning cycle and engaging range support services for weekend flying, the test team completed a limited, but operationally suitable envelope for carriage and employment of this highly effective weapon in just three days.

Lt. Cmdr. Eric "Pinto" Mitchell, a test pilot with VX-23, was excited about providing this capability to his former fleet squadron, the "Black Aces" of VFA-41 embarked aboard the USS *Nimitz* (CVN 68).

"It was imperative that we clear that capability for the Super Hornets so they could directly support troops on the ground," Mitchell said.

"VFA-41 is the Forward Air Controller - Airborne (FAC-A) squadron on the USS *Nimitz* that will coordinate attacks from the air after locating and identifying mobile and fixed targets using the Advanced Targeting Forward Looking Infra Red (ATFLIR) pod, currently deployed as an early operational capability."

VX-23 continues to test a wide range of weapons and expand employment envelopes to boost the operational flexibility and lethality of the Super Hornet as the Navy's premier carrier strike aircraft.

NAVAIR F/A-18 AESA Team Wins Laurel Award

Photo by Marshall H. Cohen, courtesy of Aviation Week & Space Technology

From left Raytheon AESA Program Manager Tom Kennedy, AW&ST's Kenneth Gazzola, NAVAIR Cmdr. Dave Dunaway, Boeing AESA Program Manager Don Thole and AW&ST's Dave North.

F/A-18 Public Affairs Office

The APG-79 Active Electronically Scanned Array (AESA) Radar program was honored by the Aviation Week and Space Technology magazine as the winner of the publication's prestigious Laurel Award. A special awards event was held April 8 at the National Air and Space Museum in Washington, D.C. The Laurel was awarded in electronics to the AESA team and specifically to the radar's program managers, Cmdr. Dave Dunaway of NAVAIR PMA265, Tom Kennedy of Raytheon, and Don Thole, of the Boeing Company. The Aerospace Laurels honor individuals and teams for significant contributions to the global field of aerospace.

"Tom Kennedy, Don Thole and I had the honor of receiving the Aviation Week Laurel Award for the AESA program," said Dunaway.

"It is an impressive event with an even more impressive cast of honorees, awardees and staff members. Although the three of us were named on the award, we are well aware that the award really belongs to the 600-plus government/industry team members who have worked so hard bringing the program to the strong position it is in today. For those of you on the team, congratulations and thank you for your hard work."

The AESA radar system, built for the F/A-18E/F, replaces existing mechanically scanned antennas with a radar beam that can be steered at close to the speed of light. Dunaway credits the program's success to the inventive acquisition strategy and the compressed timeline put together by a team of government and industry personnel.

The AESA team was honored along with Laurel award winners from other categories. Winners will be featured in the magazine's April 21 edition.

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